

## REFERENCES FOR THE COURSE ON DEGENERATIONS

CIRO CILIBERTO

The references are divided into the following categories:

- (A) General readings;
- (B) Generalities on degenerations;
- (C) Interpolation;
- (D) Toric geometry and toric degenerations;
- (E) Tropical geometry.

They are indexed accordingly.

Keep in mind that this is a very partial set of references. They are related to the lectures given in Trento, rather than reflect all the knowledge on the above topics.

### REFERENCES

- [A1] A. Beauville, *Complex Algebraic Surfaces*, London Math. Soc. Students Texts, 1996.
- [A2] Ph. Griffiths, J. Harris, *Principles of algebraic geometry*, A. Wiley, 1978.
- [A3] J. Harris, *Algebraic Geometry: A First Course*, Graduate Texts in Math., 1995.
- [A4] R. Hartshorne, *Algebraic Geometry*, Graduate Texts in Math., **52**, 1977.
  
- [B1] A. Calabri, C. Ciliberto, F. Flamini, R. Miranda, *On the geometric genus of reducible surfaces and degenerations of surfaces to union of planes*, Proceedings of the Fano Conference - Torino (I), 29 September - 5 October 2002, (2004), 277 - 312.
- [B2] A. Calabri, C. Ciliberto, F. Flamini, R. Miranda, *On the  $K^2$  of degenerations of surfaces and the multiple point formula*, Annals of Math. **165** (2007), 335–395.
- [B3] A. Calabri, C. Ciliberto, F. Flamini, R. Miranda, *On the geometric genus of reducible surfaces and degenerations of surfaces*, Annales Inst. Fourier., 57 (2) (2007), 491–516.
- [B4] A. Calabri, C. Ciliberto, F. Flamini, R. Miranda, *Degenerations of Scrolls to Unions of Planes*, Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl. 17 (2006), no. 2, 95–123.
- [B5] C. Ciliberto, R. Miranda, M. Teicher, *Pillow degenerations of  $K3$  surfaces*, in *Application of Algebraic Geometry to Computation, Physics and Coding Theory*, Nato Science Series II/36, Ciliberto et al. (eds.), Kluwer Academic Publishers, 2002.
- [B6] H. Clemens, *Degenerations of Kähler manifolds*, Duke Math. J., **44** (1977), 215–290.
- [B7] R. Friedman, D. R. Morrison, (eds.) *The birational geometry of degenerations*, Progress in Mathematics 29, Birkhauser, Boston, 1982.
- [B8] R. Miranda, *Anacapri lectures on degeneration of surfaces*, Lecture notes of four lectures at the Anacapri Summer School in Projective Geometry, June 2004 (see the web site <http://www.math.colostate.edu/~miranda/articles.html>).
- [B9] D. R. Morrison, *The Clemens-Schmid exact sequence and applications*, in Topics in Transcendental Algebraic Geometry, Ann. of Math. Studies, **106** (1984), 101–119.
  
- [C1] C. Ciliberto, *Geometrical aspects of polynomial interpolation in more variables and of Waring's problem*. ECM Vol. I (Barcelona, 2000), Progr. Math., 201, Birkhauser, Basel, 2001, 289–316.
- [C2] C. Ciliberto, R. Miranda, *Degenerations of planar linear systems*, Jurnal für die reine und angewandte Math., 501 (1998), 191-220.

- [C3] C. Ciliberto, R. Miranda, *Linear systems of plane curves with base points of equal multiplicity*, Transactions of A.M.S. 352 (2000), 4037-4050.
- [C4] C. Ciliberto, R. Miranda, *The Segre and Harbourne–Hirschowitz Conjectures*. In: Applications of algebraic geometry to coding theory, physics and computation (Eilat 2001), 37 - 51, NATO Sci. Ser. II Math. Phys. Chem., 36, Kluwer Acad. Publ., Dordrecht, (2001).
- [C5] C. Ciliberto, R. Miranda, *Nagata’s conjecture for a square or nearly-square number of points* Ricerche di Matematica, Volume 55, Number 1, (2006), 71 – 78
- [D1] S. Brannetti, *Degenerazioni di varietà toriche e interpolazione polinomiale*, Tesi di Laurea Specialistica, Università di Roma Tor Vergata, 2007.
- [D2] D. Cox, J. Sidman, *Secant varieties of toric varieties*, Journal of Pure and Applied Algebra, 209 (3), (2007), 651–669.
- [D3] G. Ewald, *Combinatorial Convexity and Algebraic Geometry*, Graduate Texts in Math. 168, Springer Verlag, 1996.
- [D4] W. Fulton, *Introduction to toric varieties*, Annals of mathematics studies 131, Princeton University Press, 1993.
- [D5] C. Ciliberto, O. Dumitrescu, R. Miranda, *Degenerations of the Veronese and Applications*, pre–print 2007 (to appear in the Proceedings of the Gent Conference, 2007; see also the web site <http://www.math.colostate.edu/~miranda/articles.html>).
- [D6] S. Hu: *Semi–stable degenerations of toric varieties and their hypersurfaces*, Comm. Anal. Geom. 14 (1) (2006), 59–89.
- [D7] T. Nishinou, B. Siebert, *Toric degenerations of toric varieties and tropical curves*, Duke Math. J., 135 (1), (2006), 1–51.
- [D8] B. Sturmfels, S. Sullivant, *Combinatorial secant varieties*, ArXiv:math/0506223 v3, 2005 (to appear in Quarterly Journal of Pure and Applied Mathematics).
- [E1] J. Draisma, *A tropical approach to secant dimensions*, arXiv:math.AG/0605345, 2006
- [E2] A. Gathmann: *Tropical algebraic geometry*, arXiv:math.AG/0601322, 2006.
- [E3] I.M. Gelfand, M. Kapranov, A.V. Zelevinsky, *Discriminants, Resultants and Multidimensional Determinants*, Birkhauser, Boston, 1994.
- [E4] G. Mikhalkin, *Amoebas of algebraic varieties and tropical geometry*, arXiv:math/0403015v1, 2004.
- [E5] L. Pachter, B. Sturmfels, (edt.), *Algebraic Statistics for Computational Biology*, Cambridge Univ. Press, 2005.
- [E6] J. Richter-Gebert, B. Sturmfels, T. Theobald, *First steps in tropical geometry*, arXiv:math/0306366v2, 2003.
- [E7] O. Viro, *Dequantization of real algebraic geometry on logarithmic paper*, arXiv:math/0005163v3, 2000.

DIPARTIMENTO DI MATEMATICA, UNIVERSITÁ DI ROMA TOR VERGATA, VIA DELLA RICERCA SCIENTIFICA, 00133 ROMA, ITALIA  
*E-mail address:* `cilibert@axp.mat.uniroma2.it`